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ABSTRACT

The status of women and minorities in higher education is discussed, and two intervention strategies are described that were implemented by the Higher Education Resource Service (HERS, Mid-Atlantic) of the University of Pennsylvania to assist in training and advancement. In conjunction with Bryn Mawr College, HERS designed a month-long summer institute to train women in academic governance, finance and budgeting, management and leadership skills, and administrative computing application. It was found that the 1979 summer institute participants were a highly career-oriented group whose self-imposed expectations demand an intensive academic curriculum. Differences were found between participants whose prime responsibility is administration and those who concentrate on teaching. Administrators found the total course and the computing, management, and professional development units more applicable than did the faculty. Faculty wanted more academic content and rigor in the curriculum. HERS also conducted a junior faculty survey to determine the feasibility of establishing a research training internship for women and minority junior faculty in four-year Mid-Atlantic colleges. A questionnaire asked respondents to provide general information on their personal background, on the home institution, academic field, training, experience and research activity. They were asked to indicate their interest in participating in a possible internship training program and to offer suggestions for such a training program. (SW)

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ADMINISTRATIVE AND RESEARCH DEVELOPMENT PROGRAMS FOR WOMEN AND MINORITIES: THE NEED AND RESPONSE

A Paper Presented at the

American Association of College Teacher Educators

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Whereas affirmative action programs and the widespread discussion of the issues involved have served to open up the formal avenues of professional development and advancement, they have done comparatively little to change the actual status of minorities and women in higher education.

Women and minorities face serious problems within the field of higher education. They are underrepresented in senior level administrative and tenured faculty positions. Women faculty devote a higher proportion of their time to teaching than their male counterparts, participate less in eductional research and research management, lack advanced research training, suffer from a series of cultural and professional barriers to advancement, have fewer role models and mentors, and generally are outside the research networks. Likewise, women administrators traditionally have been excluded from formal and on the job managerial training and lack access to the "old boy" network aiding males in securing positions and advancing. Furthermore, they face an increasingly competitive markethindering their professional development and advancement.

Recently some strides have been realized through professional development programs when accompanied with formal and informal support systems, senior networks and mentorships, specific skills training, and network formation within geographic areas (such as the Higher Education Resource Service projects, the American Council on Education (ACE) National Identification Program, and the National Institute of Education (NIE) Minorities and Women's Program provide) (Kanter and Wheatley 1978, Comment 1979). In addition to such programs a commitment to action is needed by more senior administrators, still primarily men, in order that higher education may benefit from the expertise of qualified minorities and women.

Recognizing the need for professional development of women and minority

administrators and faculty, Higher Education Resource Services (HERS, Mid-Atlantic), University of Pennsylvania, responded with two intervention strategies. First, in 1976 the Summer Institute (S.I.) for Women in Higher Education Administration was implemented. Now entering its fifth year, the S.I. has been operating on a self-sufficient basis for the past two years. Second, during 1978, in reaction to the inequities and problems faced by women and minorities in educational research, HERS was funded by NIE to determine the feasibility of establishing a research training internship directed toward women and minority junior faculty in the four year colleges of the Mid-Atlantic region.

The purpose of this paper is to acquaint you with the status of women and minorities in higher education and to discuss the two intervention strategies implemented by HERS Mid-Atlantic to assist in training and advancement. The results of the S.I. evaluation and research internship study will be summarized andimplications suggested for teacher educators and professional development program planners.

Status of Administrators

Numerous reports have indicated the status of women in higher education administration has not significantly improved during the past ten years. A 1975-76 College and University Personnel Association survey, for example, reported 79% of administrative posts were held by white men, 14% by white women, 5% by minority men, and less than 2% by minority women. The only position well represented by both sexes was the affirmative action officer, yet males who occupied that position were better paid than their female counterparts (VanAlystne 1977).

Five years ago women occupied 5% of chief executive positions in our colleges and universities, in 1978 23 more institutions were headed by women, only a 2% gain. Four more women head public coed institutions in 1978, up five from

1976. Minority women now lead 10 institutions, an increase of 7 since 1976. The largest increase in women chief executives has taken place in the four year private colleges, from a total of 24 in 1976 to 39 in 1978 (Comment, July 1979). As of May 1979 there are 183 women presidents.

It helps to be an "old boy", according to the Project on the Status and Education of Women. Daniel Socolow conducted a study of job notices in THE CHRONICLE of Higher Education which showed only 24% of the positions filled were filled by individuals who applied directly for a position without prior personal or institutional connections. (AAC 1979). Similarly, a study concerning career characteristics of women in policy-making positions in colleges in Pennsylvania shows women who have advanced in this state seem to have backgrounds and personal experiences parallel to those of men (Moore 1979).

Since many women are unable to follow the traditional path to advancement, new strategies for action are needed. Job descriptions must be written in terms of competencies required rather than emphasizing the traditional experiences and training. Systematic goals for hiring and an active commitment by governing boards and chief executive officers are suggested as well. Appointing a women, for example, to an acting deanship, provides the experiences necessary to qualify her for the final appointment (Hays 1978). With a significant number of women in senior faculty and administrative positions a hospitable environment, necessary for the progress of other women, will be created (Shavlik 1975).

Little research has been conducted on professional development programs for women in higher education administration. Britton 1976, Brucker et al 1974, Heinen et al 1975 and Kanter and Wheatley 1978 report that women have been overlooked until recently in management training and thus seek programs for skill and leadership development within a supporting environment to create a new network of professional women. These programs, according to the investigators, have

produced higher self-esteem as well as increased levels of confidence, skill, performance, and in some cases led to promotions.

Summer Institute

Description and Population

In conjunction with Bryn Mawr College, HERS Mid-Atlantic designed a month-long residential program to train women in academic governance, finance and budgeting, management and leadership skills, and administrative computing application. Provision is made for practical experience in administrative problem solving and attention is given to professional development, career planning, mentor relations and support networks.

The S.I. from its inception, has grown and become more diversified. From being predominately a Mid-Atlantic, New England group of 50, the S.I. in 1979 drew 83 participants from 30 states, Canada and the Virgin Islands.

The S.I. participants are a heterogeneous group who attend for a variety of reasons. The 1979 class comprised highly talented administrators (64%) and faculty (36%) 51% of whom had earned doctorates and 47% possessed degrees beyond the baccalaureate. Almost 69% received their highest degree in the 1970's. Seventy-one percent (71%) of the participants are between the ages of 31 and 50, with the largest number in their thirties. More than 50% of this career-oriented group of Caucasians (84%), Blacks (14%), Hispanics (1%) and Native Americans (1%) aspired to the position of Dean, Provost, or Vice President with 1.3% aiming for chief executive officer. They came predominately from large public institutions and secondly from small private colleges. More than 90% were financially supported in whole or part by their institution.

Personal and professional development and advancement and the acquisition of skills led all other reasons for participant attendance at the S.I. Three-quarters of the respondents expected to acquire skills in finance and budgeting, with

management skills (42%) and the administrative use of the computer (35%) being next in order. Slightly less than a third attended to gain access to and develop peer and senior networks and to study in a supporting, stimulating environment with other women.

Procedure

A formative evaluation consisting of a posttest questionnaire was administered the last day of the S.I. for the purpose of 1) aiding in decision making about the total program as well as its various parts, 2)assisting in program modification and improvement, 3) assessing the effectiveness of training, and 4) gaining new knowledge and understanding about women administrators and faculty in higher education.

Items were designed to address attitudes, ratings and recommendations on: quality of presentation, academic content, fulfillment of expectation and application of knowledge and skill to the job. The majority of items required responses on a Likert 1-5 point scale, others required circling the appropriate response(s) and offering comments and recommendations.

Relative frequencies were computed for each item, responses on continuum items were summarized by combining percentages at both the high (4and 5) and low (1 and 2) end of the scale to examine trends. Pearson correlations were computed on most variables. To determine the relationships between the dependent variables of quality of presentation, expectation and application and the demographic independent variables such as position, education, age, date degree conferred, cross tabulations were computed and the Chi Square and Pearson R tests of significance used.

Findings

Seventy-two percent of the respondents (N=80) felt good to very good about the S.I. experience overall with more than 65% expecting to use the experience gained by enlarging their job, improving their performance and advancing

their career.

Respondents rated the academic units on three dimensions: quality of the presentation, how well their expectation for acquiring knowledge and skill were fulfilled, and how well they felt they could apply the training to their jobs. Table 1 summarizes these results.

Table 1

Respondent Overall Ratings of Academic Units by Quality of Presentation, Fulfillment of Expectations for the Acquisition of Knowledge and Skill, and Application to the Job
(Combined Percentage Rating, Good to Very Good (4 and 5))

Unit	Quality	Rank	Expectation	Rank	Application	Rank
Finance	83.8%	1st	81.3%	1st	55.0%	4th
Academic Gov.	80.0	2nd	65.1	3rd	73.9	1st
Computing	75.1	3rd	50.0	4th	31.3	5th
Prof. Develop.	63.8	4th	71.5	2nd	67.6	2nd
Management	45.0	5th	37.6	5th	56.3	3rd

Despite the high overall quality rating given the finance unit (ranked 1st), respondents find knowledge gained (ranked 4th) from this area difficult to apply. In fact, the specific areas of basic accounting concepts, management information systems and financial modeling were found most difficult by between 20%-32% of the participants. Almost three-fourths of the respondents rated the quality of the computing unit good to very good, yet only half had their expectations fulfilled and less than one third felt they could apply what they learned very well. The reasons for this may be that women are expressing anxiety to financial, machine and math-related activities for a variety of reasons. While the management unit was rated the lowest on the quality and expectation dimension, more than half felt they could apply the skills learned. Apparently, management skills are perceived as being more easily applied despite the disappointing presentation.

Many stressed the need for a more selective admission policy while maintaining a heterogeneous mix. They preferred fewer participants even if this necessitated a tuition increase. (The 1979 fee was $1575). Others desired

programs targeted to certain groups such as middle managers or senior level administrators.

Perhaps the most interesting result is the difference between those whose prime responsibility is administration and those who concentrate on teaching. A significant relationship, tested using Pearson correlation coefficients, exists between being an administrator and being able to utilize the skills and knowledge learned. Administrators found the total course of study and the computing, management and professional development units more applicable than did the faculty. Moreover, faculty commented they desired more academic content and rigor in the curriculum.

On certain topics within the academic units, a significantly higher percentage of administrators than faculty felt they could apply very well or extremely well the knowledge learned to their job. Table 2 depicts the differences in mean scores.

Table 2

Mean Scores for Topics on Which Administrators and Faculty Differ

Topics	M	N	p	r
Influencing MIS				
Admin	2.88	48	.001	-.38
Fac	1.90	10		
Using Cpters				
Admin	3.29	48	.000	-.52
Fac	2.09	11		
Using FIND				
Admin	2.77	47	.02	-.28
Fac	2.09	11		
Using Cpter Resources				
Admin	3.55	49	.03	-.24
Fac	2.64	11		
Underst Employee Labor Relat				
Admin	3.66	50	.01	-.40
Fac	2.73	11		
Underst Gov Relat				
Admin	3.19	48	.05	-.23
Fac	2.58	12		

Administrators' career objectives were more clearly clarified than faculty's as a result of the S.I. A significantly higher percentage of administrators and directors experienced clarification on various aspects of their career development. Table 3 reports the significant dfferences in mean scores.

Table 3

Administrator/Faculty, Director/Professor Differences on Clarification of Career Objectives

	M	N	p	r
Career Options				
Admin	3.41	49	.04	-.39
Fac	2.31	13		
Experience to Advance				
Admin	3.43	49	.03	-.37
Fac	2.38	13		
Peer Networking Function				
Admin	3.57	42	.03	-.37
Fac	2.57	14		
Peer Networking Function				
Director	3.57	14	.03	-.57
Assoc P/Prof	2.18	11		
Career Options				
Director	3.80	15	.04	-.55
Assoc P/Prof	2.38	13		
Necessary Skills for Advancement				
Director	3.73	15	.02	-.63
Assoc P/Prof	2.17	12		
Necessary Experience for Advancement				
Director	3.60	15	.04	-.51
Assoc P/Prof	2.31	13		

As one might expect, those participants with more recent degrees are significantly able to apply financial and computing knowledge, yet those with the more recent degrees desire more academic content in the computing unit.

Aside from the academic and career orientation of the S.I. the most important experiences were informal interactions with participants, new perspective gained toward self, the job, and higher education in general.

Concerning training, respondents desire to participate in programs emphasizing higher education issues, human behavior skills, financial analysis and the law

and the university.

In summary, the 1979 S.I. participants are a highly career-oriented group whose self-imposed expectations demand an intensive, rigorous academic curriculum. The differences that exist between administrators and faculty necessitate consideration in planning professional development programs. Reasons for these difference may only be speculated. It is possible that this group of women may be more sophisticated in their academic and career experiences than previous classes. Traditionally, many faculty take a dim view of "non-scholarly" administrative positions and as a result may be more judgmental of management-oriented training. Coupled with their difference in career experiences faculty's prevailing attitude toward administration may impede their perception of applying skills to the job even though the majority of them aspire to senior level administrative positions. On the other hand, program planners must respond by designing a more academically rigorous curriculum.

Undoubtedly, other factors in addition to training, some of which have been mentioned, influence the advancement of minorities and women. A longitudinal study is needed to assess long-term effects of training and to identify and design other strategies for advancing women and minorities in higher education administration. Uncovering methods employed by successful women and minority administrators can provide important information to incorporate in future professional development programs.

Status and Needs of Junior Faculty

Like their counterparts in administration, women and minority junior faculty face an increasingly competitive market with declining enrollments, decreasing faculty replacement rates, and the recent increase in the mandatory retirement age to 70. While research, development and dissemination efforts in education have grown tremendously in the past two decades, the underrepresentation of women and

ethnic/racial minorities is obvious (Blake & Williams 1977, Lipman-Blumen et al 1975). The Black educational policy researcher is an untapped natural resource (Wright 1979). Fewer minority persons and women accept postdoctoral positions in research than Caucasians, moreover a strong relationship has been found between holding a research assistantship and accepting a research position.

Both the National Center for Education Statistics, 1978 and the National Science Foundation report a decrease in educational research funds. While research performers in other sectors and in some disciplines realized, and expect next year, an absolute increase in federal funds, the increase generally is not commensurate with the rate of inflation.

Furthermore, there has been a decline of tenured women and most women remain in the lower ranks of instructor or assistant professor. The proportion of tenured women dropped from 44% in 1971-72 to 27% in 1974-75, compared to only a slight decline in tenured men--from 59% to 57% (Kilson 1976). In the early 80's, except for possible extenuating circumstances, one might expect a change in trend since the percentage of doctorates earned by women has dramatically increased from a range of 10% to 13% between 1939 and 1970 to 23% during the year of 1975-76 (National Center for Educational Statistics 1978).

Burciaga, Chiang, Medicine, Pollard (Stivers & Leckie 1977) offer some solutions to the problems and barriers minority women face in advancement. They stress the need for support of research on their special concerns, for peer networks and for placing minorities in positions of authority to serve as mentors and role models. Specialized training, career counseling and placing minority women on significant committees and boards of professional organizations are recommended as well. In general, the building of visibility for and the integrating of women and minorities in the educational research community is one recommendation suggested by a large number of investigators concerned with the advancement of minorities and women.

For the many reasons cited, it becomes evident that increased efforts need to be launched to provide women and minorities with additional expertise and access to research networks that will give them a competitive edge in obtaining tenured research positions, both inside and outside higher education. Mid-career internships, when combined with research skill training and professional networking, are seen as one potentially effective strategy to correct this situation (Blake & Williams 1977, Jackson & Pitterle 1978).

The Minorities and Women's Program of the National Institute of Education operates under the overall purpose of increasing the participation of minorities and women in all aspects of educational research. Over 600 men and women are involved in a total of 56 funded projects reaching into 36 states, 20 cities and the District of Columbia (Comment July 1979, December 1979). The results of the junior faculty internship feasibility study, discussed here, are finding use in a number of these newly funded projects.

Educational Internship Feasibility Study

Procedure

The objectives of the study were to identify minority and women junior faculty, to determine and assess their research training needs and interests, to involve senior researchers in working with the program, to identify and evaluate existing internship programs, and to develop a training model that would help to increase the number of qualified researchers able to advance.

Various techniques were employed in the study including four mail surveys and one telephone survey to internship programs, a working conference of senior social science and educational researchers and administrators, pre- and post-planning evaluation meetings, and final dissemination of results. This paper will focus on the Junior Faculty Survey and briefly summarize the results of the other surveys.

The sample included women and minority junior faculty (assistant professors,

lecturers, instructors) (N=458) who are members of departments of education and related social sciences in the four year colleges and universities of the Mid-Atlantic region (Delaware, Washington, D.C. Maryland, New Jersey, New York and Pennsylvania). Sixty-five percent of the respondents were from public institutions many of which were the former state teacher's colleges.

Junior faculty were identified with the assistance of department chairpersons, senior researchers, minority and women's caucus representatives, state education officials and interested college officers. In addition, a commercial label list was purchased from which a random sample was drawn.

A multiple choice, open-ended, self-administered Junior Faculty Questionnaire (JFQ) asked respondents to provide general information on their personal background, on the home institution, academic field, training, experience and research activity. They were asked also to indicate their interest in participating in a possible internship training program, constraints they might have in applying and suggestions for components of such a training program.

Frequency distributions, expressed in percentages, were computed on all items. Pearson correlation coefficients were employed to investigate the relationship among training, experience and desired training. The analysis assisted in depicting training patterns (consistent and inconsistent relationships) and suggested reasons for these results as well.

Findings

Those surveyed were mostly female (91.7%) and primarily in their 30's, though a sizable group was younger (29.7%). Over a quarter of the respondents were minorities: Blacks (16.8%), Native Americans (3.1%), Asian Americans (3.1%), Hispanics (1.7%). More than half had PhDs (56.3%).

Junior faculty indicated their research experience and training and future desire for training by responding to items delineating both overall and detailed

research categories.

The analysis of the survey indicated the training needs more appropriately addressed in a training program are: grantspersonship (61.2%), policy relevant research (53.1%), evaluation and dissemination techniques (49.2%), formulating theoretically relevant research (49.1%), computer use and application (48.5%), and advanced statistical techniques (45%).

The overall picture of respondents' training, experience and desired training and experience (T/E) are shown in Figure 1, from which a number of comments may be made.

In the area of 1.0-Formulating Theoretically Relevant Research, it is interesting that even though a great many respondents have had training (66.6%) and experience (61.4%), almost half of those surveyed still saw a need for training and experience.

A more consistent relationship appears regarding 2.0-Formulating Policy Relevant Research. Here the second lowest degree of training (22.9%) and experience (27.9%) expressed in the survey was coupled with the second highest desire for such training and experience (53.1%).

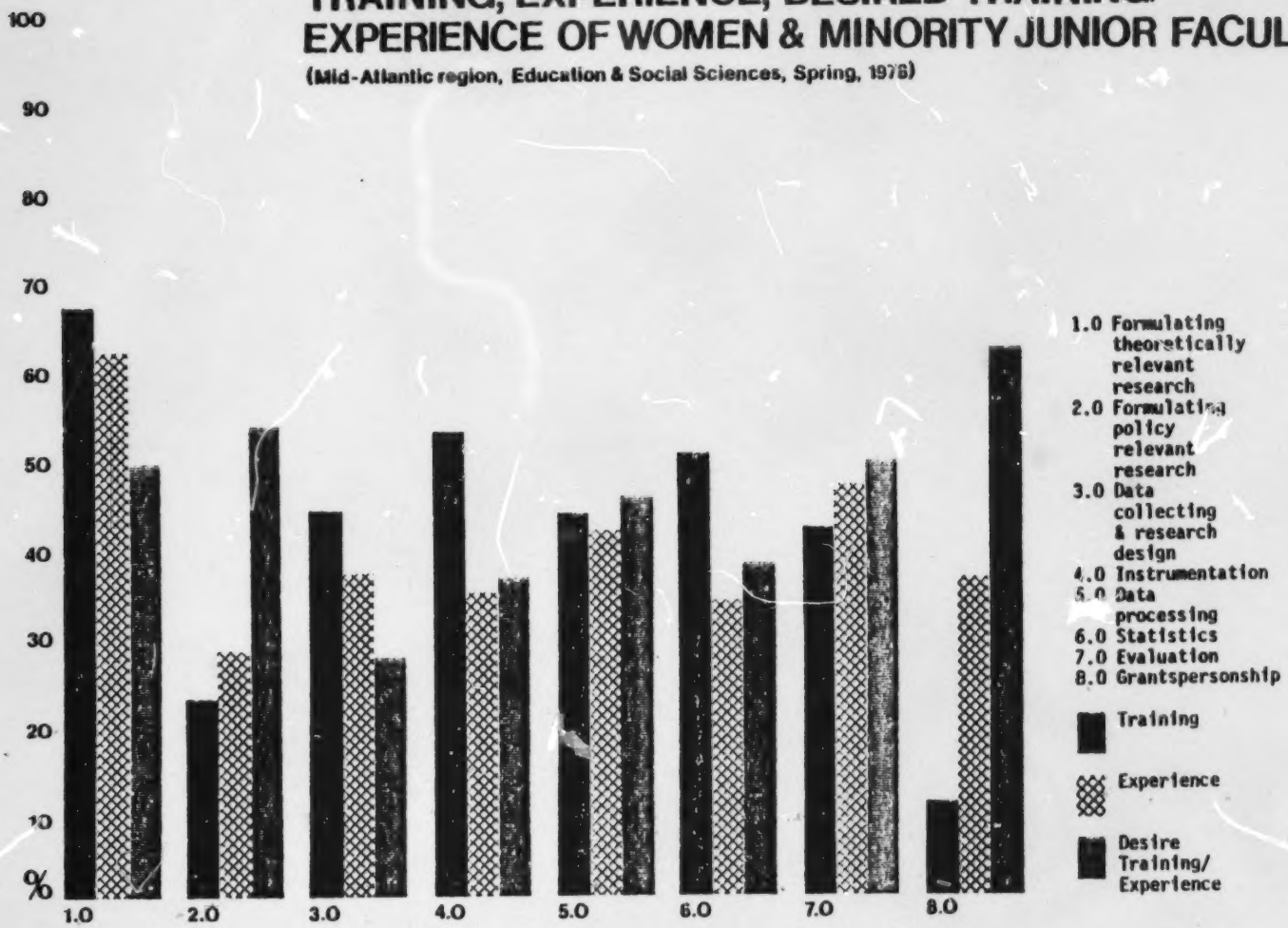
A considerable number of respondents had training in 3.0-Data Collection and Research Design and 4.0-Instrumentation though fewer had actual experience and little interest was shown in pursuing either of these areas.

In the area of 5.0-Data Processing, respondents seem to split into two groups--those who have had training and experience (43.1%, 41.2%) and therefore see little need for more, and those who are unfamiliar with this field and would like assistance (45.4%).

Almost half reported some training in 6.0-Statistics, however, considerably fewer mentioned training in the more complex techniques of multivariate analysis and data reduction. The fact that the increase d esire for training is less than proportionate to the lack of training and experience may be an indication of either

TRAINING, EXPERIENCE, DESIRED TRAINING/ EXPERIENCE OF WOMEN & MINORITY JUNIOR FACULTY

(Mid-Atlantic region, Education & Social Sciences, Spring, 1978)



Source: Educational Research Internship for Women and Minority Junior Faculty. A Feasibility Study. Dorothy J. Jackson and Kenneth Pitterle. Higher Education Resource Services, University of Pennsylvania, Philadelphia, Pa., 1978.

respondents' possible anxiety toward math and statistics generally or respondents seeing little need for further training in the area.

A number of factors may account for the relatively low interest shown for training in categories 3.0, 4.0, 5.0 and 6.0. Older respondents may not be involved in these areas and respondent institutions may focus on teaching rather than research, thus they see little need for additional training along these lines.

Within the categories where experience exceed training, on the other hand, the highest desire for training and experience was recorded. The results for 7.0-Evaluation give the impression that many respondents (49.2%) would welcome formal training in an area where they have been compelled to perform (experience = 46.8%), possibly without the necessary training. Similarly with 8.0-Grantspersonship, the category in which the fewest respondents by far have had training (10.5%). While more have gained some experience (36%), the overwhelming majority (61.2%) obviously saw a great need for training and experience in this area.

A large majority of the junior faculty respondents (72.3%) expressed a definite interest in participating in the proposed internship program. They offered strong evidence for intern placement near their home. Among other considerations in the decision to participate were adequate salary, relocation benefits, job placement assistance, obtaining leave and family obligations. Despite some of these constraints, 16.2% indicated they had no reservation in participating, and 16.9% said subsidiary amenities were not important in their decision to participate in the internship program.

Results of the Caucus Representative and Chairperson Surveys largely parallel those of the Junior Faculty Survey, except for their greater emphasis on data collection and research design training.

The Internship Identification Survey (IIS) confirmed the special need for a

mid-career research training internship for women and minorities. The IIS also led to a number of important recommendations to aid in the all-important mentor/intern match. Adequate financial support for interns is paramount, and a variety of ingenious funding methods is necessary.

The program model, designed from survey results and a working conference of senior researchers, consists of a one-year internship taking place in diverse research settings, with mentors committed to the professional development of their interns. Emphasis is placed on professional and peer networking, on-site training, special research seminars, collaboration with prominent mentors on the production of a publishable research paper, and built-in procedures for ongoing and final evaluation.

Summary

Recognizing the high cost of internship training, an adaptation of the training model is a strategy that may prove feasible to a number of audiences and thus have a larger impact on training and advancing women and minorities in educational research. Three variations, incorporating key components of the proposed model, are possible. A mini-internship could offer placement with a mentor during the summer. Those junior faculty near a potential placement site might consider obtaining a partial leave for placement during the academic year. Other faculty at colleges providing pretenured sabbatics could take advantage of the program at a relatively low cost.

A concerted effort is being made nationally to increase the participation of minorities and women in education research and to assist in their advancement to key leadership positions. While this study was targeted to junior faculty in the Mid-Atlantic region, many of the results and the proposed model are adaptable to a variety of audiences. It is likely that the needs and interests of junior faculty in other areas of the country are somewaht similar to those in the

Mid-Atlantic region. In those regions where a particular minority group is concentrated, of course, their special concerns and needs should be addressed. Other administrators and researchers interested in advancing women and minorities, both inside and outside higher education, can use the findings in designing future educational interventions.

Discussion

The two strategies discussed raise questions concerning faculty and administrative professional development programs and undergraduate and graduate curricula, both of which deserve attention from teacher educators, deans and program planners.

Recognizing the overall need for professional development of minorities and women in higher education and gaining the commitment to design feasible programs appropriate to the institution and the particular needs of the participants are paramount. While similarities exist for example, between women and minorities and administrators and faculty, differences in needs and experiences must be taken into account in program planning. Individual faculty and staff have responsibilities too in a rapidly changing higher education scene. They must prepare themselves as well as their students for future roles and job responsibilities.

A study of the curriculum and concomitant programs and services becomes a high priority. Should the curriculum provide for greater emphasis on research and administrative training with opportunities for internships and mentor relationships, thus preparing the student for a more competitive market? Should teacher educators prepare both themselves and their students for careers outside the traditional educational organization?

Many institutions are already facing and making plans to adjust to the economic constraints of the 1980's. Should more responsibility for professional development lie with professional organizations, teacher corps, teaching centers and a variety of state and federally funded programs?

Answers to these and other policy-implicating questions require foresight in program planning and a concerted commitment to action to improve the status of women and minorities in educational research and administration.

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